AMENDMENTS TO THE CLAIMS

Cancel claims 17 and 18 without prejudice. Please accept amended claims 9 and 11-15, and new claims 19-25 as follows:

1-8. (Cancelled)

9. (Currently Amended) A method for synchronizing distributed processors comprising the steps of:

establishing a socket-connection between at least two processors;

determining a roundtrip delay;

determining a roundtrip-delay threshold;

determining a current round-trip delay and an offset;

adding the current round-trip delay to a list of roundtrip delays;

determining a new roundtrip-delay threshold;

determining whether the current roundtrip delay is greater than the new roundtrip-delay threshold;~~:~~

~~upon determining the current roundtrip delay to be greater than the new threshold,~~

determining whether a desired number of round-trip delays have been determined upon determining the current roundtrip delay to be greater than the new roundtrip-delay threshold; and

~~upon determining that the current threshold is not greater than the new threshold,~~

determining whether the offset is greater than an offset threshold,~~;~~ adjusting a clock according to ~~an~~ whether the offset is greater than the offset threshold~~;~~ and

determining a linear regression upon determining that the current roundtrip delay is not greater than the new roundtrip-delay threshold.

10. (Original) The method of claim 9, wherein a probability of the round-trip delay being greater than the roundtrip-delay threshold is about 0.5 and a probability of the round-trip delay being less than the roundtrip-delay threshold is about 0.5

11. (Currently Amended) The method of claim 9, wherein the step of determining whether the desired number of ~~thirty~~ round-trip delays have been determined further comprises the step of entering a synchronization method upon determining the desired number round-trip delays.

12. (Currently Amended) The method of claim 9, wherein the step of determining whether the desired number of ~~thirty~~ round-trip delays have been determined further comprises recursively performing the step of determining ~~a~~ the current round-trip delay and an offset upon determining less than the desired number delays.

13. (Currently Amended) The method of claim 9, wherein the step of adjusting ~~a~~ the clock according to ~~an offset~~ whether the offset is greater than the offset threshold further comprises the steps of:

decrementing by an update-interval upon determining the offset to be greater than the offset threshold; and

incrementing by the update-interval upon determining the offset to be less than the offset threshold.

14. (Currently Amended) The method of claim 9, further comprising recursively performing the step of determining~~, recursively, a~~ the current round-trip delay and ~~an~~ the offset.

15. (Currently Amended) The method of claim 9, wherein the step of determining ~~a~~ the linear regression further comprises the steps of:

setting a current synchronization time;

determining whether a number of measured offsets is greater than a desired number:

upon determining that the number of measured offsets is greater than the desired number, removing an oldest offset from a list of offsets and adding a current offset to the list of offsets and determining parameters of ~~a~~ the linear regression ~~line~~ from the list of offsets;

upon determining that the number of measured offsets is not greater than the desired number, adding the current offset to the list of offsets;

estimating the current offset using the linear regression ~~line~~;

incrementing the current synchronization time; and

determining whether the current synchronization time is greater than an update-interval:

upon determining the current synchronization time to be less than the update-interval, re-estimating the current offset using the linear regression ~~line~~;

upon determining the current synchronization time to be greater than the update-interval, ~~measuring a~~ re-determining the current roundtrip delay and the current offset.

16. (Original) The method of claim 9, wherein the desired number of roundtrip delays is thirty.

17-18. (Cancelled)

19. (New) A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for synchronizing distributed processors, the method steps comprising:

establishing a socket-connection between at least two processors;

determining a roundtrip delay;

determining a roundtrip-delay threshold;

determining a current round-trip delay and an offset;

adding the current round-trip delay to a list of roundtrip delays;

determining a new roundtrip-delay threshold;

determining whether the current roundtrip delay is greater than the new roundtrip-delay threshold;

determining whether a desired number of round-trip delays have been determined upon determining the current roundtrip delay to be greater than the new roundtrip-delay threshold; and

determining whether the offset is greater than an offset threshold, adjusting a clock according to whether the offset is greater than the offset threshold and determining a linear regression upon determining that the current roundtrip delay is not greater than the new roundtrip-delay threshold.

20. (New) The method of claim 19, wherein a probability of the round-trip delay being greater than the roundtrip-delay threshold is about 0.5 and a probability of the round-trip delay being less than the roundtrip-delay threshold is about 0.5

21. (New) The method of claim 19, wherein the step of determining whether the desired number of round-trip delays have been determined further comprises the step of entering a synchronization method upon determining the desired number round-trip delays.

22. (New) The method of claim 19, wherein the step of determining whether the desired number of round-trip delays have been determined further comprises recursively performing the step of determining the current round-trip delay and an offset upon determining less than the desired number delays.

23. (New) The method of claim 19, wherein the step of adjusting the clock according to whether the offset is greater than the offset threshold further comprises the steps of:

decrementing by an update-interval upon determining the offset to be greater than the offset threshold; and

incrementing by the update-interval upon determining the offset to be less than the offset threshold.

24. (New) The method of claim 19, further comprising recursively performing the step of determining the current round-trip delay and the offset.

25. (New) The method of claim 19, wherein the step of determining the linear regression further comprises the steps of:

setting a current synchronization time;

determining whether a number of measured offsets is greater than a desired number:

upon determining that the number of measured offsets is greater than the desired number, removing an oldest offset from a list of offsets and adding a current offset to the list of offsets and determining parameters of the linear regression from the list of offsets;

upon determining that the number of measured offsets is not greater than the desired number, adding the current offset to the list of offsets;

estimating the current offset using the linear regression;

incrementing the current synchronization time; and

determining whether the current synchronization time is greater than an update-interval:

upon determining the current synchronization time to be less than the update-interval, re-estimating the current offset using the linear regression; upon determining the current synchronization time to be greater than the update-interval, re-determining the current roundtrip delay and the current offset.